

## SENATE BILL NO. 66

INTRODUCED BY R. ERICKSON

A BILL FOR AN ACT ENTITLED: "AN ACT REGULATING CARBON SEQUESTRATION; AUTHORIZING THE BOARD OF ENVIRONMENTAL REVIEW TO ADOPT RULES FOR THE REGULATION, PERMITTING, AND ADMINISTRATION OF GEOLOGIC CARBON SEQUESTRATION; PROVIDING THE BOARD WITH THE AUTHORITY TO ASSESS FEES, ISSUE PENALTIES, REQUIRE LIABILITY INSURANCE, AND SET BONDS; REQUIRING NOTICE OF PERMIT APPLICATIONS FOR GEOLOGIC CARBON DIOXIDE SEQUESTRATION WELLS; REQUIRING COORDINATION WITH THE BOARD OF OIL AND GAS CONSERVATION; SPECIFYING OWNERSHIP OF PORE SPACE IN STRATA UNDERLYING SURFACES; AFFIRMING THE DOMINANCE OF THE MINERAL ESTATE; PROVIDING FOR A DESCRIPTION OF PORE SPACE RIGHTS PRIOR TO A TRANSFER; AND PROVIDING EFFECTIVE DATES."

WHEREAS, geologic storage of carbon dioxide will benefit the citizens of the state and the state's environment by reducing greenhouse gas emissions; and

WHEREAS, Montana has a range of geologic sites that could be used for carbon dioxide storage, including depleted oil reservoirs and coal seams too deep to mine, and it is possible that geologic carbon sequestration in the state could become a major part of the economy, producing jobs while preserving the environment.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA:

NEW SECTION. **Section 1. Short title.** [Sections 1 through 7] may be cited as the "Geologic Carbon Sequestration Act".

NEW SECTION. **Section 2. Definitions.** As used in [sections 1 through 7], the following definitions apply:

(1) "Board" means the board of environmental review provided for in 2-15-3502.

(2) "Carbon dioxide" means anthropogenically sourced carbon dioxide of sufficient purity and quality as to not compromise the safety and efficiency of a geologic formation.

(3) (a) "Carbon dioxide sequestration well" means a well that is used for injection of carbon dioxide into a geologic formation for permanent storage.

(b) The term does not include a well regulated under Title 82, chapter 11, in which carbon dioxide is injected for the purpose of enhancing the recovery of oil and gas.

(4) "Geologic sequestration site" or "site" means the underground geologic formation, including but not limited to deep saline formations, basalt or oil shale formations, depleted oil and gas reservoirs, and unminable coal beds, where carbon dioxide is injected and stored.

(5) "Verification and monitoring" means measuring the amount of carbon dioxide stored at a specific geologic sequestration site, checking the site for leaks or deterioration of storage integrity, and ensuring that carbon dioxide is stored in a way that is permanent and not harmful to the ecosystem. The term includes:

(a) using models to show, before injection is allowed, that injected carbon dioxide will be securely stored. Modeling includes but is not limited to consideration of seismic activity, possible paths for fugitive emissions, and chemical reactions in the geologic formation.

(b) tracking plume behavior after injection of carbon dioxide, including the use of pressure monitoring; and

(c) establishing a system of leak monitors.

(6) "Well" means a bored, drilled, or driven shaft with a depth that is greater than the largest surface dimension.

**NEW SECTION.** **Section 3. Rules for administration and permitting.** (1) The board shall adopt rules necessary for the administration and enforcement of [sections 1 through 7]. The rules must include but are not limited to provisions that address:

(a) establishment of a geologic carbon dioxide sequestration program, including a permit system and requirements and procedures for issuing carbon dioxide sequestration well permits;

(b) evaluation of possible geologic sequestration sites, including but not limited to geologic surveys, existing data, test wells, and the feasibility of remediation;

(c) recordkeeping and reporting requirements sufficient to measure the effectiveness of carbon dioxide sequestration wells and sites;

(d) documentation demonstrating that an applicant has all legal rights, including but not limited to the right to surface use and pore space, as defined in [section 8], necessary to sequester carbon dioxide and

1 associated constituents into the proposed site;

2 (e) procedures that a permit holder shall follow to ensure that the drilling, casing, and plugging of carbon  
3 dioxide sequestration wells do not allow carbon dioxide to move out of one stratum into another, the intrusion of  
4 water into the carbon dioxide strata, seepages, or the pollution of fresh water supplies;

5 (f) characterization of the injection zone and aquifers above and below the injection zone that may be  
6 affected, including applicable pressure and fluid chemistry data to describe the projected effects of injection  
7 activities;

8 (g) verification and monitoring at geologic sequestration sites;

9 (h) mitigation of leaks, including the ability to stop the leaking of carbon dioxide and to address impacts  
10 of leaks;

11 (i) restoration of surface lands;

12 (j) minimum levels of liability insurance that must be carried by the permit holder while the well is under  
13 construction, during the lifetime of the well's operation, and for 75 years following closure of the well; and

14 (k) furnishing, updating, and release of a reasonable bond with good and sufficient surety, conditioned  
15 for performance of the duty to comply with [sections 1 through 7] and rules adopted by the board. The bond  
16 provided by the permit holder must be sufficient to guarantee the effectiveness of the carbon dioxide sequestration  
17 well and site and to cover costs to offset carbon dioxide emissions because of any failure of a carbon dioxide  
18 sequestration well or geologic sequestration site to contain carbon dioxide.

19 (2) The rules must include, at a minimum, requirements pursuant to applicable federal regulatory  
20 standards established by:

21 (a) the Energy Independence and Security Act of 2007 and subsequent acts;

22 (b) the Safe Drinking Water Act, 42 U.S.C. 300f, et seq.;

23 (c) the underground injection central program, 40 CFR, parts 144-147; and

24 (d) the environmental protection agency's federal requirements under the underground injection control  
25 program for carbon dioxide geologic sequestration wells, EPA 816-F-08-032, July 2008, and subsequent updates.

26 (3) The board shall periodically update rules to provide consistency between the rules or regulations  
27 promulgated under this section and any rules or regulations promulgated for the regulation of geologic carbon  
28 sequestration by the United States environmental protection agency.

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30 NEW SECTION. **Section 4. Penalties and fees.** The board may establish rules addressing:

(1) fees commensurate with the costs of administering and implementing the provisions of [sections 1 through 7]; and

(2) penalties, including fines of \$75 a day up to \$10,000 a day for each violation of any rule or order of the board or a provision of [sections 1 through 7].

**NEW SECTION. Section 5. Notice of application.** (1) Surface owners, mineral claimants, lessees, and other owners of record of subsurface interests at a geologic sequestration site must receive notice of applications for a permit.

(2) The department of environmental quality shall provide notice of an application for a permit. The notice must be:

(a) published in a newspaper of general circulation in each county where the geologic sequestration site is located; and

(b) mailed to all surface owners, mineral claimants, mineral owners, lessees, and other owners of record of subsurface interests that are located within 1 mile of the proposed boundary of the geologic sequestration site.

**NEW SECTION. Section 6. Fees and penalties.** Any fees or penalties collected pursuant to rules adopted under [section 4] must be deposited in an account in the state special revenue fund provided for in 17-2-102 for use by the department of environmental quality to administer [sections 1 through 7].

**NEW SECTION. Section 7. Coordination with board of oil and gas conservation.** (1) A well regulated under Title 82, chapter 11, in which carbon dioxide is injected for the purpose of enhancing the recovery of oil and gas may be converted to a carbon dioxide sequestration well.

(2) The board shall coordinate the development of rules with the board of oil and gas conservation with regard to the conversion of wells referred to in subsection (1) to carbon dioxide sequestration wells.

(3) Wells converted to carbon dioxide sequestration wells pursuant to this section are subject to rules adopted under [sections 3 and 4].

**NEW SECTION. Section 8. Mineral activities and ownership at geologic sequestration sites -- definition.** (1) Nothing in [sections 8 through 11] may be considered to affect the lawful right of a surface or mineral owner to drill or bore through a geologic sequestration site if done in accordance with the rules

1 established pursuant to [sections 1 through 7].

2 (2) [Sections 8 through 11] provide for the protection and compensation of surface owners of land  
3 underlaid with pore space that may be used for the storage of carbon dioxide or other substances and affirm the  
4 dominance of mineral estates while allowing for the necessary development of pore space.

5 (3) For the purposes of [sections 8 through 11], "pore space" means subsurface space of any size,  
6 whether vacant or filled, that can be used as storage space for carbon dioxide, compressed air, or other  
7 substances injected into the space for storage. It does not include a natural gas storage reservoir.

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9 **NEW SECTION. Section 9. Ownership of pore space.** (1) The ownership of all pore space in all strata  
10 below the surface of this state is vested in the owner of the surface above the strata.

11 (2) A conveyance of the surface ownership of real property is a conveyance of the pore space in all strata  
12 below the surface of that real property unless the ownership interest in that pore space previously has been  
13 severed from the surface ownership or is explicitly excluded in the conveyance.

14 (3) It is the property owner's right, as established by 70-16-101, to convey pore space. An agreement  
15 conveying mineral or other interests underlying the surface may not convey ownership of any pore space in the  
16 stratum unless the agreement explicitly conveys that ownership interest.

17 (4) [Sections 8 through 11] do not alter, amend, diminish, or invalidate rights to the storage use of  
18 subsurface pore space acquired by contract or lease prior to [the effective date of this section].

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20 **NEW SECTION. Section 10. Dominance of mineral estate.** (1) [Sections 8 through 11] may not be  
21 construed to change or alter common law in accordance with 1-1-108 as it relates to the rights belonging to or  
22 the dominance of the mineral estate, including but not limited to the right to mine, drill, or recompleat a well, to  
23 inject substances to facilitate production, or to implement enhanced recovery, as defined in 82-11-101, for the  
24 purposes of recovery of oil, gas, or other minerals.

25 (2) If it is determined by the mineral owner that an underground reservoir, natural or constructed, is  
26 depleted of oil or gas or abandoned, it may be considered pore space in accordance with the provisions of  
27 [sections 8 through 11].

28 (3) All instruments transferring the rights to pore space under [sections 8 through 11] must describe the  
29 scope of any right to use the surface estate. The owner of any pore space right may not use the surface estate  
30 beyond the conditions established in a properly recorded instrument.

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2       **NEW SECTION. Section 11. Pore space description and rights for transfer.** (1) Transfers of pore  
3 space rights made after [the effective date of this section] are void at the option of the surface owner if the transfer  
4 instrument does not contain a specific description of the location of the pore space being transferred.

5       (2) The description must include but is not limited to:  
6       (a) a detailed description of the subsurface stratum or strata involved in the transfer;  
7       (b) a legal description of the boundaries of the surface lying over the transferred pore space; and  
8       (c) a list of the existing lessees, rights, or interests on the property, including mineral interests and any  
9 other rights attached to the surface lying over the transferred pore space.

10       (3) The description required in this section must be reviewed by a professional land surveyor, as defined  
11 in 37-67-101, and a copy must be:

12       (a) transmitted to the department of environmental quality to allow for proper notice pursuant to [section  
13 5]; and

14       (b) recorded with the clerk of the county or counties where the transferred pore space is located.  
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16       **NEW SECTION. Section 12. Codification instruction.** (1) [Sections 1 through 7] are intended to be  
17 codified as an integral part of Title 75 and the provisions of Title 75 apply to [sections 1 through 7].

18       (2) [Sections 8 through 11] are intended to be codified as an integral part of Title 70, and the provisions  
19 of Title 70 apply to [sections 8 through 11].  
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21       **NEW SECTION. Section 13. Transition -- contingent implementation.** If the environmental protection  
22 agency adopts rules allowing states to apply for primacy over carbon dioxide sequestration wells under the  
23 federal underground injection control program, the department of environmental quality shall hire a consultant  
24 and consult with the board of oil and gas conservation and the department of natural resources and conservation  
25 to develop draft rules pursuant to [sections 1 through 7] in order to seek primacy.  
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27       **NEW SECTION. Section 14. Effective dates -- contingency.** (1) [Sections 1 through 7] are effective  
28 on the date that the board of environmental review is granted primacy to administer activities at carbon dioxide  
29 sequestration wells.

30       (2) [Sections 8 through 13 and this section] are effective on passage and approval.

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